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09/893,327	06/27/2001	James T. Cole	GRI-99-007	2040

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EXAMINER

PRICE, CARL D

ART UNIT	PAPER NUMBER
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3749

DATE MAILED: 11/13/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/893,327

Applicant(s)

COLE ET AL.

Examiner

CARL D. PRICE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 9-16 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-8 directed to non-elected species have been cancelled by applicant.

Claims 9-16 remain under examination.

In regard to claims 9-15 applicant argues that the prior art references of record fail to disclose or teach the structure and method as now set forth in applicant's amended claims 9-15 and claim 16, respectively.

In regard to claim 16, applicant argues that the prior art of record fails to show "disposition of an adjustable airflow surface within the cooking chamber of the claimed oven and an actuator suitable for adjusting the adjustable airflow surface operably connected to the adjustable airflow surface".

Applicant's attention is directed to the newly applied prior art reference of Brunner (U.S. Patent No.- 4,862,599) now being relied on to address applicant's claimed invention.

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Brunner is directed to a process and apparatus for drying including the steps of using a blower to create a convection air flow pattern through a heating chamber where there are adjustable airflow surfaces within the heating chamber. Actuators suitable for adjusting the adjustable airflow surface are connected to the adjustable airflow surface. The structure of Brunner being not unlike applicant's convection oven having a "cooking" chamber. Brunner discloses the following:

... **"Additional air conducting surfaces 16, as shown in FIG. 1, are arranged in both spaces 6 at different levels above the bottom of the chamber. Each surface 16 is formed of a flat, rectangular strip of sheet metal. The distances from the sidewall 5 increase from bottom to top of the illustrated arrangement. Each air conducting surface 16 is supported on one horizontal shaft. The lengthwise sides of air conducting surfaces 16 run parallel to the shafts. These rotatably mounted shafts are each coupled with an electric setting motor 17. The setting motors are supported for height adjustment by holders 17a.**

(8) FIG. 2 shows an exemplary embodiment in which, because of the great depth of drying chamber 1, the air conducting surfaces 13 and 16 do not extend to the entire depth of the chamber. Two identically configured air conducting surfaces having two different setting motors, one for each, are arranged adjacent to each other, to influence differently the air flow in different areas over the total depth of the chamber." ...

... "(10) Individual wood layers at different levels of wood stack 2 are each provided with a moisture sensor or velocity sensor 19, each supplying an analogous measuring signal. These moisture sensors 19 are connected by connection lines with an electronic control circuit 20. Control circuit 20 is located outside drying chamber 1 from which point the total operation is controlled. **More than one transverter 21 is connected to control circuit 20, for continuously setting the velocity of the drive motors of axial fans 10. The direction of rotation can be supplied beforehand.** Spray nozzles 18 and setting motors 14 and 17, as well as heating radiator 11, and the motors for the setting the pivot points of axial fans 10 are all controlled by control circuit 20.

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(11) Control circuit 20 determines the optimum air velocity of the air flows between the individual cut wood layers based on the data obtained regarding cut wood 3 subjected to drying in drying chamber 1. **The positioning of air conducting surfaces 13 and 16 and the rotational velocity of axial fans 10 are predetermined accordingly.** The air velocity is maintained based on the measured values supplied from humidity sensors 19. If necessary, adjustment of conducting surfaces 13 and/or 16 and of the rotational velocity of axial fans 10 and/or their pivot points, corresponding to a program setting at a predetermined theoretical value is accomplished. This program can also include a **reversal of the direction of flow.**...

In regard to claim 9, for example, Brunner differs from applicant's claimed invention in that applicant characterizes the claimed invention as a "convection oven" having a "cooking" chamber. As stated herein below, and in the previous rejection of the claims, terms such as "cooking", and the phrase "during a baking cycle", are deemed to be statements of intended use which fail to further limit the scope of the claimed invention.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the inducer having a "valve" whereby combustion products *are one of* conveyed into said cooking chamber *and* exhausted from said cooking oven (claim 13 (currently amended)) must be shown or the feature(s) canceled from the claim(s). While the combustion products are shown to be "conveyed from" the cooking oven through radiant tubes (25) located within the blower plenum there is no indication in the drawing

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figures that the combustion products “conveyed into said cooking chamber”, nor is there a valve associated with the inducer for permitting such a flow. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from

an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 9,10 and 16: rejected under 35 U.S.C. 102(b)

Claims 9,10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Brunner(U.S. Patent No. - 4,862,599).

In regard to claims 9 and 10, Brunner shows and discloses an oven including a heating chamber (6), two reversible blowers (10) mounted in a blower plenum (9) for creating multiple flow patterns during a heating cycle. Brunner also includes actuators (17) suitable for selectively positioning adjustable airflow control surfaces (16) which are located within the heating chamber (6) and used to affect the distribution and flow pattern of heated air conveyed through, and about articles being treated in, the heating chamber.

The term “cooking” and the phrases “during a cooking cycle” and “during a baking cycle” are deemed to be statements of intended use which fail to further limit the scope of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re*

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Casey, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case the mere use of the term “cooking” or “baking” fails to add to the claims a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Or, the mere use of the term “cooking” or “baking” fails to result in a manipulative difference as compared to the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 11: rejected under 35 U.S.C. 103(a)

Claim 11 is rejected under 35 U.S.C. 103(a) as being obvious over Brunner.

Brunner shows and discloses an oven including a heating chamber (6), two reversible blowers (10) mounted in a blower plenum (9) for creating multiple flow patterns during a heating cycle. Brunner also includes actuators (17) suitable for selectively positioning adjustable airflow control surfaces (16) which are located within the heating chamber (6) and used to affect the distribution and flow pattern of heated air conveyed through, and about articles being treated in, the heating chamber.

In regard to claim 11, in particular, Brunner discloses the following:

“(8) FIG. 2 shows an exemplary embodiment in which, because of the great depth of drying chamber 1, the air conducting surfaces 13 and 16 do not extend to the entire depth of the chamber. Two identically configured air conducting surfaces having two different setting motors, one for each, are arranged adjacent to each other, to influence differently the air flow in different areas over the total depth of the chamber.

(9) Spray nozzles 18 on sidewalls 5 of drying chamber 1 allow humidification of the air.

(10) Individual wood layers at different levels of wood stack 2 are each provided with a moisture sensor or velocity sensor 19, each supplying an analogous measuring signal. These moisture sensors 19 are connected by connection lines with an electronic control circuit 20. **Control circuit 20 is located outside drying chamber 1 from which point the total operation is controlled. More than one transverter 21 is connected to control circuit 20, for continuously setting the velocity of the drive motors of axial fans 10. The direction of rotation can be supplied beforehand.** Spray nozzles 18 and setting motors 14 and 17, as well as heating radiator 11, and the motors for the setting the pivot points of axial fans 10 are all controlled by control circuit 20.

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While Brunner does not specifically state that the speed of the blowers are different, it would have been obvious to a person having ordinary skill in the art that the relative speeds in which the Brunner fan/blower operation are both variable, independent and at times necessarily “different”.

Claims 12: rejected under 35 U.S.C. 103

Claim 12 is rejected under 35 U.S.C. 103(a) as being obvious over Brunner in view of Meisser et al (of record).

Brunner shows and discloses an oven including a heating chamber (6), two reversible blowers (10) mounted in a blower plenum (9) for creating multiple flow patterns during a heating cycle. Brunner also includes actuators (17) suitable for selectively positioning adjustable airflow control surfaces (16) which are located within the heating chamber (6) and used to affect the distribution and flow pattern of heated air conveyed through, and about articles being treated in, the heating chamber. Brunner however does not teach that the variable speed blowers (10) operate in different directions.

Meisser et al. teaches, from the same convection heater field of endeavor as GB ‘177, a heated oven including two reversible blowers (24a, 24b) mounted in a blower plenum (35) for creating multiple flow patterns during a heating cycle. The blowers can circulate heated air in the same or opposite directions (see column 9, line 54 – column 10, line 45).

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On regard to claim 12, for the purpose of modifying the flow of air passing over the heater elements, to thereby control the transfer of heat from the heater elements to the air flow, it would have been obvious to a person having ordinary skill in the art to rotate the blowers of Brunner in opposite directions, in view of the teaching of Meisser et al.

The term “cooking” and the phrases “during a cooking cycle” and “during a baking cycle” are deemed to be statements of intended use which fail to further limit the scope of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case the mere use of the term “cooking” or “baking” fails to add to the claims a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Or, the mere use of the term “cooking” or “baking” fails to result in a manipulative difference as compared to the prior art.

Claims 13,14: rejected under 35 U.S.C. 103(a)

Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB ‘177 (GB 2215177) in view of Cook (U.S. Patent No. – Re. 28226) and Brunner.

GB '177 shows and discloses a heated convection cooking oven including a reversible blower (15) mounted in a blower plenum adjacent a heat exchange tube (4) communicating with a blower header (5) for creating multiple flow patterns during a heating cycle. However, GB '177 does not disclose a moveable valve in the inducer.

Cook '226 teaches, from the same convection heater field of endeavor as GB '177, providing a valve (41,61) in the inducer (39,40,59,66) to control gases exiting the oven space.

Brunner teaches, from the same convection heater field of endeavor as GB '177, an oven including a heating chamber (6), two reversible blowers (10) mounted in a blower plenum (9) for creating multiple flow patterns during a heating cycle. Brunner also includes actuators (17) suitable for selectively positioning adjustable airflow control surfaces (16) which are located within the heating chamber (6) and used to affect the distribution and flow pattern of heated air conveyed through, and about articles being treated in, the heating chamber.

In regard to claim 13, for the purpose of controlling gases exiting the oven space, it would have been obvious to a person having ordinary skill in the art to modify the inducer (15,5) of GB '177 to include a valve, in view of the teaching of Cook '226. Also, for the purpose of selectively directing the flow of heated air throughout the oven chamber of GB '177, it would have been obvious to a person having ordinary skill in the art to modify the oven chamber thereof to include therein adjustable airflow control surfaces and actuators suitable for selectively positioning the adjustable airflow control surfaces, in view of the teaching of Brunner. In regard

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to claim 14, for the purpose of providing additional control of the airflow throughout the oven chamber, it would have been obvious to a person having ordinary skill in the art to modify GB '177 to include two reversible blower, also in view of the teaching of Brunner.

In regard to the claims, the term "cooking" and the phrases "during a cooking cycle" and "during a baking cycle" are deemed to be statements of intended use which fail to further limit the scope of the claimed invention. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case the mere use of the term "cooking" or "baking" fails to add to the claims a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Or, the mere use of the term "cooking" or "baking" fails to result in a manipulative difference as compared to the prior art.

Claim 15: rejected under 35 U.S.C. 103(a)

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over GB '177 in view of Cook '226 and Brunner, as applied to claim 13 above, and further in view of Murray.

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GB '177 shows and discloses a heated convection cooking oven including a reversible blower (15) mounted in a blower plenum adjacent a heat exchange tube (4) communicating with a blower header (5) for creating multiple flow patterns during a heating cycle. However, GB '177 does not disclose a plurality of heat exchange tubes wherein each has internal baffles.

Murray teaches, from the same convection heater field of endeavor as GB '177, providing a plurality of heat exchange tubes (63) wherein each has internal baffles (64) as a heat source.

In regard to claim 15, for the purpose of increasing the size and efficiency of the heat source, it would have been obvious to a person having ordinary skill in the art to modify GB '177 to include a plurality of heat exchange tubes where each has internal baffles, in view of the teaching of Murray.

Conclusion

See the attached PTO FORM 892 for prior art made of record and not relied upon and which are considered pertinent to applicant's disclosure.

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USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is 703-308-1953. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1148/0858.



CARL D. PRICE
Primary Examiner
Art Unit 3749

CP